AMENDMENTS TO THE CLAIMS

Please cancel claims 2-26, 28-52, 54-69 and 71-85, without prejudice, and add new claims 86-89, as shown below. This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (original): A surgical instrument for scraping bone comprising:

a generally planar blade having a first end and a second end separated by a middle section, the first end having a cutting edge and an opening to allow bone shavings to pass therethrough and the middle section having at least one outwardly extending lobe;

a collection chamber for holding accumulated bone shavings having a bottom, sidewalls, and an end wall, the chamber having a upstanding retainer member for securing the at least one lobe of the blade to the collection chamber; and

an elongated handle portion coupled to the end wall of the collection chamber.

Claim 2-26 (canceled)

Claim 27 (original): A surgical instrument for scraping bone comprising:

a blade having a first end having a cutting edge and an opening to allow bone shavings to pass therethrough;

a collection chamber for holding accumulated bone shavings having a bottom, sidewalls, and an end wall, a portion of the side wall supporting a portion of the blade; and

an elongated handle portion coupled to the end wall of the collection chamber through a flexible joint.

Claim 28-52 (canceled)

Claim 53 (original): A surgical instrument for scraping bone comprising:

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a generally planar blade having a first end and a second end separated by a middle section, the first end having a cutting edge and an opening to allow bone shavings to pass therethrough and the middle section having at least one outwardly extending lobe, and the second end comprising a pair of cantilevered spring elements;

a collection chamber for holding accumulated bone shavings having a bottom, sidewalls, and an end wall, the chamber having a upstanding retainer member for securing the at least one lobe of the blade to the collection chamber, and a retaining mechanism for interacting with the blade spring elements; and

an elongated handle portion coupled to the end wall of the collection chamber.

Claim 54-69 (canceled)

Claim 70 (original): A blade for a bone scraping surgical instrument comprising:

a first end and a second end separated by a middle section, the first end having a cutting edge and an opening to allow bone shavings to pass therethrough and the middle section having a pair of outwardly extending lobes disposed on either side of a centrally located elongated opening.

Claim 71-85 (canceled)

Claim 86 (new): The surgical instrument of claim 1, characterized by one or more of the following features:

(a) wherein the elongated handle portion is flexibly secured to the end wall;

(b) wherein the collection chamber comprises a mixing area for mixing the bone shavings, blood and other constituent graft materials;

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(c) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength;

(d) wherein the collection chamber and the elongated handle portion are coupled by a flexible or bendable joint;

(e) wherein the collection chamber is formed of a polymeric material or stainless steel;

(f) wherein the collection chamber is formed of a medical grade plastic;

(g) wherein the collection chamber is formed of a transparent or translucent plastic material;

(h) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength which allows the cutting edge to be positioned at a range of angles relative to a longitudinal axis of the handle portion;

(i) wherein the blade comprises stainless steel or monocrystalline sapphire;

(j) wherein the blade comprises a pair of opposing lobes;

(k) wherein the blade comprises a pair of opposing lobes which are disposed adjacent an elongated longitudinal slot;

(l) wherein the middle section of the blade comprises an elongated longitudinal slot adjacent the at least one outwardly extending lobe;

(m) wherein the second end comprises a stop mechanism to restrict linear travel of the blade relative to the collection chamber;

(n) wherein the elongated handle portion is coupled to the end wall of the collection chamber through a ball and socket joint;

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(o) wherein the second end comprises a stop mechanism for positioning the blade in the instrument;

(p) wherein the second end comprises a protrusion for facilitating extraction of the blade from the collection chamber;

(q) wherein the second end comprises an opening through which a prying device may be inserted to facilitate extraction of the blade from the collection chamber;

(r) wherein the upstanding retainer mechanism comprises a first cam surface, a second cam surface and a ledge portion, wherein the ledge portion preferably helps maintain at least a portion of the blade in contact with a top surface of the collection chamber, and/or wherein the ledge portion is spaced from the top surface approximately the thickness of the blade;

(s) wherein the side walls of the collection chamber support the first end of the blade in the instrument;

(t) wherein the collection chamber further comprises a stabilizing members to restrict rotational movement of the blade in the instrument;

(u) wherein the upstanding retainer mechanism comprises a first cam surface, a second cam surface and a ledge portion, and the first cam surface applies a first compressive force on the at least one lobe when a second compressive force is applied to the second end of the blade, wherein the first compressive force preferably urges the at least one lobe to be displaced toward a centerline of the blade, and the blade preferably comprises an elongated slot along the centerline and the at least one lobe extends into the slot when the first compressive force is applied; and

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(v) wherein the blade includes a pair of cantilevered spring elements adjacent its proximal end, wherein the cantilevered spring elements preferably form tension cam surfaces for engaging with a follower pin on the collection chamber, and wherein the follower pin preferably is formed of a material harder than the blade material.

Claim 87 (new): The surgical instrument of claim 27, characterized by one or more of the following features:

(a) wherein the elongated handle portion is flexibly secured to the end wall;

(b) wherein the collection chamber comprises a mixing area for mixing the bone shavings, blood and other constituent graft materials;

(c) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength;

(d) wherein the collection chamber and the elongated handle portion are coupled by a flexible or bendable joint;

(e) wherein the collection chamber is formed of a polymeric material or stainless steel;

(f) wherein the collection chamber is formed of a medical grade plastic.

(g) wherein the collection chamber is formed of a transparent or translucent plastic material;

(h) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength which allows the cutting edge to be positioned at a range of angles relative to a longitudinal axis of the handle portion;

(i) wherein the blade is formed of stainless steel or monocrystalline sapphire;

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(j) wherein the blade comprises a pair of opposing lobes;

(k) wherein the blade comprises a pair of opposing lobes which are disposed adjacent an elongated longitudinal slot;

(l) wherein the middle section of the blade comprises an elongated longitudinal slot adjacent the at least one outwardly extending lobe;

(m) wherein the second end comprises a stop mechanism to restrict linear travel of the blade relative to the collection chamber;

(n) wherein the elongated handle portion is coupled to the end wall of the collection chamber through a ball and socket joint;

(o) wherein the second end comprises a stop mechanism for positioning the blade in the instrument;

(p) wherein the second end comprises a protrusion for facilitating extraction of the blade from the collection chamber;

(q) wherein the second end comprises an opening through which a prying device may be inserted to facilitate extraction of the blade from the collection chamber;

(r) wherein the upstanding retainer mechanism comprises a first cam surface, a second cam surface and a ledge portion, wherein the ledge portion preferably helps maintain at least a portion of the blade in contact with a top surface of the collection chamber, and/or wherein the ledge portion is spaced from the top surface approximately the thickness of the blade;

(s) wherein the side walls of the collection chamber support the first end of the blade in the instrument;

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(t) wherein the collection chamber further comprises a stabilizing members to restrict rotational movement of the blade in the instrument;

(u) wherein the upstanding retainer mechanism comprises a first cam surface, a second cam surface and a ledge portion, and the first cam surface applies a first compressive force on the at least one lobe when a second compressive force is applied to the second end of the blade; wherein the first compressive force preferably urges the at least one lobe to be displaced toward a centerline of the blade, and wherein the blade preferably comprises an elongated slot along the centerline and the at least one lobe extends into the slot when the first compressive force is applied; and

(v) wherein the blade includes a pair of cantilevered spring elements adjacent its proximal end, wherein the cantilevered spring elements preferably form tension cam surfaces for engaging with a follower pin on the collection chamber, and wherein the follower pin preferably is formed of a material harder than the blade material.

Claim 88 (new): The surgical instrument of claim 53, characterized by one or more of the following features:

(a) wherein the elongated handle portion is flexibly secured to the end wall;

(b) wherein the collection chamber comprises a mixing area for mixing the bone shavings, blood and other constituent graft materials;

(c) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength;

(d) wherein the collection chamber and the elongated handle portion are coupled by a flexible or bendable joint.

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(e) wherein the collection chamber is formed of a polymeric material or stainless steel;

(f) wherein the polymeric material is formed of a medical grade plastic;

(g) wherein the collection chamber is formed of a transparent or translucent plastic material.

(h) wherein the collection chamber and the elongated handle portion are coupled by an area of reduced mechanical strength which allows the cutting edge to be positioned at a range of angles relative to a longitudinal axis of the handle portion;

(i) wherein the blade is formed of stainless steel or monocrystalline sapphire;

(j) wherein the middle section of the blade comprises a pair of opposing lobes;

(k) wherein the blade comprises a pair of opposing lobes which are disposed adjacent a pair of hold-down tabs formed on the collection chamber.

(l) wherein the elongated handle portion is coupled to the end wall of the collection chamber through a ball and socket joint;

(m) wherein the second end comprises a stop mechanism for positioning the blade in the instrument;

(n) wherein the second end comprises a sloped surface for facilitating extraction of the blade from the collection chamber by means of a prying device;

(o) wherein the retainer mechanism comprises a pin;

(p) wherein the side walls of the collection chamber support the first end of the blade in the instrument; and

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(q) wherein the blade includes a pair of cantilevered spring elements adjacent its proximal end; wherein the cantilevered spring elements preferably form tension cam surfaces for engaging with a follower pin on the collection chamber, and wherein the follower pin preferably is formed of a material harder than the blade material.

Claim 89 (new): The blade of claim 70, characterized by one or more of the following features:

(a) wherein the second end has a stop mechanism to limit linear travel of the blade when coupled to a cooperating collection chamber;

(b) wherein the second end has a protrusion for facilitating extraction of the blade from a cooperating collection chamber;

(c) wherein the second end has an opening through which a prying instrument can be inserted to facilitate extraction of the blade from a cooperating collection chamber;

(d) wherein the secured end comprises a pair of cantilevered spring elements;

(e) wherein the secured end includes indicia for indicating correct orientation of the blade, and

(f) wherein the secured end includes a notch on one side of the blade for indicating correct orientation of the blade.

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